

DECLARATION
Utility Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **AFFINITY BASED SELF-ASSEMBLY SYSTEMS AND DEVICES FOR PHOTONIC AND ELECTRONIC APPLICATIONS** the specification of which

(Check One) ☒ is attached hereto OR
☐ was filed on _____ as United States Application Serial No. _____ or PCT International Application No. _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Date of Filing	Priority Claimed	
			Yes	No

I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application Number	PCT Parent Number	Parent Filing Date	Status-Patented, Pending or Abandoned
08/760,933		December 6, 1996	Pending

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

201	FULL NAME OF INVENTOR	FIRST Name Michael	MIDDLE Initial J.	LAST Name Heller	
	RESIDENCE & CITIZENSHIP	City Encinitas	State or Foreign Country CA		Country of Citizenship UNITED STATES
	POST OFFICE ADDRESS	1614 Hawk View Drive	City Encinitas	State or Country CA	Zip Code 92024
INVENTOR'S SIGNATURE <u>Michael J. Heller</u> DATE <u>7/24/03</u>					

COPYPatent US 400
Attorney Docket: 612,404-182
(Former L&L Ref: 223/165)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:)	
)	Group Art Unit: 1631
Michael J. Heller et al)	
)	Examiner: Marschel, A.
Serial No.: 08/760,933)	
)	Allowed: October 17, 2002
Filed: December 6, 1996)	
)	Issue Fee Due: January 17, 2003
For: METHODS FOR ELECTRONIC)	
ASSEMBLY AND FABRICATION OF)	
DEVICE)	

**POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST
AND REVOCATION OF PRIOR POWERS**Commissioner for Patents
Washington, D.C. 20231

Sir:

I, William Franzblau, Vice President Legal Affairs, NANOGEN, INC. the parent corporation of NANOTRONICS, INC., as a duly authorized proxy of the Assignee of record of the entire interest of the above application, hereby revoke all powers of attorney previously given, and hereby appoints all of the registered practitioners at the law firm of O'MELVENY & MYERS LLP, 114 Pacifica, Suite 100, Irvine, California 92618-3315, as its attorneys with full power of substitution and revocation to transact all business in the United States Patent and Trademark Office and in countries

CERTIFICATE OF MAILING
(37 C.F.R. §1.8a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231.

Date of Deposit
IR1:1036557.1

1/14/03

Denise Doss

Name of Person Mailing Paper

Signature of Person Mailing Paper

Express Mail No.
EV337191037US

Patent US 400
Attorney Docket: 612,404-182
(Former L&L Ref: 223/165)

other than the United States in connection with this application and corresponding foreign applications and patents, and to do all things necessary or appropriate therefore before any competent International Authorities in connection with any international patent application(s) corresponding to the above-identified application. The registered practitioners of O'MELVENY & MYERS LLP, 114 Pacifica, Suite 100, Irvine, CA 92618 are identified by Customer Number 34263:



O'MELVENY & MYERS LLP
114 Pacifica, Suite 100
Irvine, CA 92618
(949) 737-2900

Please send all correspondence to the attention of David B. Murphy, at the above address, and direct all telephone calls to David B. Murphy at (949) 737-2900.

Assignee of interest: Nanotronics, Inc.
Address: 10398 Pacific Center Court, San Diego, California 92121
Recorded in PTO: July 28, 1997, Reel: 8643, Frame 0113

In conformance with 37 C.F.R. §3.73(b), I hereby certify that all documents in connection with the chain of title have been reviewed, and to the best of my knowledge, all right, title and interest is in the above-identified Assignee.

Dated: 1/6/03

By: [Signature]
Signature
Proxy
Title

Nanotronics, Inc.
10398 Pacific Center Court
San Diego, California 92121

POWER OF ATTORNEY**January 6, 2003**

I, Howard C. Birndorf, Chairman of the Board and Chief Executive Officer of Nanotronics, Inc., a California corporation (the "Company"), hereby appoint William Franzblau, Esq., Vice President, Legal Affairs and Secretary of the Company's parent corporation, Nanogen, Inc., a Delaware corporation, as my attorney in fact for the limited purposes as authorized in this document. I hereby grant Mr. Franzblau full power and authority to take any and all required actions relating to the approval and execution of any documents relating to any patent applications, patents, trademarks, copyrights and any other forms of intellectual property of the Company that need to be filed, maintained and otherwise acted upon by the Company from time to time.

This power of attorney shall expire on December 31, 2004.



Howard C. Birndorf



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SEPTEMBER 06, 1997

PTAS

LYON & LYON
DAVID B. MURPHY
633 WEST FIFTH STREET
LOS ANGELES, CA 90071



100512987A

COPY

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/28/1997

REEL/FRAME: 8643/0113
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HELLER, MICHAEL J.

DOC DATE: 07/23/1997

ASSIGNOR:

CABLE, JEFFREY M.

DOC DATE: 07/23/1997

ASSIGNEE:

NANOTRONICS, INC.
10398 PACIFIC CENTER COURT
SAN DIEGO, CALIFORNIA 92121

SERIAL NUMBER: 08760933
PATENT NUMBER:

FILING DATE: 12/20/1996
ISSUE DATE:

SHARMALLA SIMPSON, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

SEP 15 1997

Express Mail No.
EV337191037US

08-18-1997



100512987

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Michael J. Heller
Jeffrey M. CableAdditional name(s) of conveying party(ies) attached? Yes ☐ No ☒

3. Nature of conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Execution Date: July 23, 1997

2. Name and address of receiving party(ies):

Name Nanotronics, Inc.

Internal Address: _____

Street Address: 10398 Pacific Center CourtCity: San Diego State: CA ZIP 92121Additional name(s) & address(es) attached? Yes ☐ No ☐

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: July 23, 1997

A. Patent Application No(s).

B. Patent No(s).

08/760,933Additional numbers attached? Yes ☐ No ☒

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: LYON & LYONInternal Address: Attn: David B. MurphyStreet Address: 633 West Fifth StreetCity: Los Angeles State: CA ZIP 900716. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41): \$ 40.00☒ Included in the enclosed check☐ Authorized to be charged to deposit account

8. Deposit Account Number:

12-2475

(Attach duplicate copy of this page if paying by deposit account.)

DO NOT USE THIS SPACE

9. Statement and signature

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*David B. Murphy, Reg. No. 31,125

Name of Person Signing & Reg. No.


SignatureJuly 24, 1997

Date

Total number of pages including cover sheet, attachments, and documents:

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

ASSIGNMENT

WHEREAS, We, **MICHAEL J. HELLER**, a citizen of the United States, residing at 1614 Hawk View Drive, Encinitas, California 92024, and **JEFFREY M. CABLE**, a citizen of the United States, residing at 40905 Via Los Altos, Temecula, California 92591 (hereinafter referred to as "ASSIGNORS"), have invented and own a certain invention entitled "**AFFINITY BASED SELF-ASSEMBLY SYSTEMS AND DEVICES FOR PHOTONIC AND ELECTRONIC APPLICATIONS**", for which application for Letters Patent of the United States of America has been filed on **December 6, 1996**, under Serial No. **08/760,933**; and

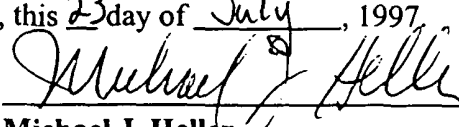
WHEREAS, **NANOTRONICS, INC.**, a corporation organized and existing under and by virtue of the laws of the State of California and having its principal place of business at 10398 Pacific Center Court, San Diego, California 92121 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the right, title and interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States of America, its territorial possessions and in any and all countries foreign thereto.

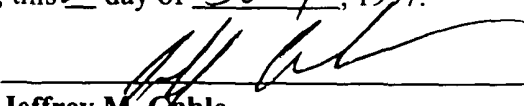
NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign, transfer and set over unto the said ASSIGNEE, its successors and assigns, the right, title and interest to said invention and to all Letters Patent or similar legal protection, not only in the United States and its territorial possessions, but in all countries foreign thereto, to be obtained for said invention by said application or any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted, including all priority rights under the International Convention; and ASSIGNORS hereby authorize and

request the Commissioner of Patents and Trademarks to issue said Letters Patent and any legal equivalent thereof to said ASSIGNEE, its successors and assigns, in accordance with this Assignment.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

ASSIGNORS further covenant that ASSIGNEE will, upon request of ASSIGNEE, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to ASSIGNORS and will testify as to the same in any interference or legal proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its designated legal representative any and all papers, instruments, declarations or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof in any foreign country which may be necessary or desirable to carry out the purposes thereof.

WITNESS my hand at San Diego, California, this 23 day of July, 1997.

Michael J. Heller

WITNESS my hand at SAN DIEGO, California, this 25th day of JULY, 1997.

Jeffrey M. Cable